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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,376	07/30/2001	Arturo A. Rodriguez	A-6699	1054
5642 7590 12/24/2008 SCIENTIFIC-ATLANTA, INC. INTELLECTUAL PROPERTY DEPARTMENT 5030 SUGARLOAF PARKWAY LAWRENCEVILLE, GA 30044				
EXAMINER SHELEHEDA, JAMES R				
ART UNIT 2424		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOmail@sciatl.com

Office Action Summary

Application No.

09/918,376

Applicant(s)

RODRIGUEZ ET AL.

Examiner

JAMES SHELEHEDA

Art Unit

2424

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-20, 23-30, 32-51, 53-57, 95-101, 129 and 130 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-20, 23-30, 32-51, 53-57, 95-101, 129 and 130 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/30/08 has been entered.

Response to Arguments

2. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5-18, 23, 24, 27-39, 40-44, 46-48, 57 and 97 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 5-18, 27, 29-38, 42 and 48 recite the limitation "the logic". There is insufficient antecedent basis for this limitation in the claim.

Claims 5-10, 12-14, 16-18, 28-30, 34, 36, 40-44, 46-48, 57 and 97 recite the limitation "the local file system". There is insufficient antecedent basis for this limitation in the claim.

Claims 10-12, 17, 48 and 57 recite the limitation "the virtual file system". There is insufficient antecedent basis for this limitation in the claim.

Claim 23 recites the limitation "the media". There is insufficient antecedent basis for this limitation in the claim.

Claim 24 recite the limitation "the media partitions". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5-14, 16-20, 39-47, 95-101 and 129 are rejected under 35 U.S.C. 103(a) as being unpatentable over Payton (5,790,935) (of record) in view of Norwood (5,983,316) (of record), Tsukidate et al. (Tsukidate) (6,507,950), Schein et al. (Schein) (6,002,394) (of record) and Ellis et al. (Ellis) (6,928,653).

As to claims 39, 95 and 129, Payton discloses a dual mode file system in a subscriber network television system (Fig. 2), comprising:

a digital home communication terminal (28) comprising:

a memory that stores executable instruction sequences (software inherently present in memory to control the local server, 28; column 6, lines 1-50);

a processor that executes the stored executable instruction sequences (inherently present to control the local server, 28; column 6, lines 1-50);

the stored executable instruction sequences including:

an EPG application that provides user access to EPG information (column 6, lines 20-36);

a dual mode file system that provides a common interface to both a local storage device and a remotely located storage device (column 7, lines 13-20 and lines 47-55);
and

presenting the EPG information responsive to a user request (column 6, lines 20-36),

he fails to specifically disclose instructions that determine whether a local storage device is coupled to the DHCT;

instructions that use the dual mode file system to retrieve the EPG information from the remotely located storage device and store the EPG information in the memory, responsive to determining that the local storage device is not coupled to the DHCT;

instructions that use the dual mode file system to retrieve the EPG information from the remotely located storage device and store the EPG information in the local storage device, responsive to determining that the local storage device is coupled to the DHCT;

wherein the EPG information includes a list of media content instances for a standard amount of days, a list of media content instances for an extended amount of days, channels for the media content instances, standard description information for the media content instances, long description information for the media content instances and media content instance preview audio and video clips.

In an analogous art, Norwood discloses a computer storage system (Fig. 1) wherein a disk monitor will determine whether local file systems (disk drives; column 2, lines 38-48) are currently coupled and available for use by the system (column 2, lines 28-38 and column 5, lines 22-42) to allow the system to dynamically determine which resources are currently available (column 2, line 28-column 3, line 14) for the typical benefit of allowing the computer system to dynamically determine status changes in available storage resources and operate accordingly (see Abstract and column 2, line 28-column 3, line 14 and column 1, lines 8-31).

Additionally, in an analogous art, Tsukidate discloses a broadcast receiver (Fig. 10) which will retrieve EPG information from a remotely located storage device and store the EPG information in memory (column 13, lines 10-13, lines 48-56 and column 14, lines 25-30) and also retrieve the EPG information from the remotely located storage device and store the EPG information in a local storage device (column 12, lines 60-65 and column 13, lines 40-44), the EPG information including a list of media content instances (column 8, lines 1-12), channels for the media content instances (column 8, lines 1-12), standard description for the media content instances (column 8, lines 1-39), long description for the media content instances (column 8, lines 1-39) for

the typical benefit of allowing the user to quickly access and use the program guide (column 14, lines 22-35).

Also, in an analogous art, Schein discloses a subscriber network television system (Fig. 1) wherein the receiver will receive EPG information including audio and video preview clips for the broadcast media (column 21, line 51-column 22, line 9 and column 20, lines 57-64) for the typical benefit of allowing the viewer to easily determine programming they will enjoy by viewing a short clip of the upcoming program.

Finally, in an analogous art, Ellis discloses an interactive electronic program guide system (Fig. 3 and 8) wherein the EPG is customized to include media listings for a standard amount of days and extended amount of days (Fig. 8-10; column 6, line 30-column 7, line 20) for the typical benefit of maximizing memory usage while allowing additional applications to be stored in memory (column 3, lines 4-34).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Payton's system to include determining whether the local storage device is coupled, and responsive to determining whether the local file system is coupled, utilizing just the virtual file system or both the virtual file system and the local file system, as taught in combination with Norwood, for the typical benefit of allowing the computer system to dynamically determine status changes in available storage resources and operate accordingly.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Payton and Norwood's system to include instructions that use the dual mode file system to retrieve the EPG information from the

remotely located storage device and store the EPG information in the memory and instructions that use the dual mode file system to retrieve the EPG information from the remotely located storage device and store the EPG information in the local storage device, as taught in combination with Tsukidate, for the typical benefit of allowing the user to quickly access and use the program guide.

Also, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Payton, Norwood and Tsukidate's system to media content instance preview audio and video clips, as taught in combination with Schein, for the typical benefit of allowing the viewer to easily determine programming they will enjoy by viewing a short clip of the upcoming program.

Finally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Payton, Norwood, Tsukidate and Schein's system to include a list of media content instances for a standard amount of days, a list of media content instances for an extended amount of days, as taught in combination with Ellis, for the typical benefit of maximizing memory usage while allowing additional applications to be stored in memory.

As to claim 9, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the processor is further configured with the logic to provide feedback to a user when the local file system is available (indicating if the content is locally available or not; see Payton at column 6, lines 31-33).

As to claim 10, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the processor is further configured with the logic to transition from supporting the processor with data from the combination of the virtual file system and the local file system (see Payton at column 8, lines 11-25) to supporting the processor with data from the virtual file system when the logic detects that the local file system is unavailable (user requesting content stored at the central server instead of locally; see Payton at column 7, lines 13-20 and lines 47-55).

As to claim 11, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the logic is further configured to support the processor with data from the virtual file system (see Payton at column 7, lines 13-20 and lines 47-55) by receiving the data into the memory and causing playback from the virtual file system to a screen display (see Payton at column 7, lines 13-20 and lines 47-55, column 8, lines 11-21 and Fig. 5).

As to claim 12, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the processor is further configured with the logic to substantially simultaneously transfer data to the local file system (transmitting content from the refresh queue to local storage whenever bandwidth is available; see Payton at column 7, lines 36-56) while receiving additional data from the virtual file system to the memory (receiving an on-demand requested movie; see Payton at column 7, lines 13-20 and lines 47-55, column 8, lines 11-21 and Fig. 5).

As to claim 13, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the logic is further configured to support the processor with data from the local file system by receiving the data into the memory (see Payton at column 7, lines 12-18), wherein the logic is further configured to cause playback from the memory to a screen display (see Payton at Fig. 5; column 8, lines 35-37 and lines 15-21).

As to claim 14, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the logic is configured to support the processor with data from the local file system by streaming the data from the local file system to a display device (see Payton at Fig. 5; column 8, lines 35-37 and lines 15-21).

As to claim 16, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the processor is further configured with the logic to store in the local file system data associated with a future media content instance (storing recommended movies in advance; see Payton at column 4, lines 8-22), wherein said data is received into the local file system in advance of the presentation of said future media content instance (see Payton at column 3, lines 18-42 and column 4, lines 8-22).

As to claim 17, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the processor is further configured with the logic to receive data from the virtual file system to the local file system while substantially simultaneously uploading data from

the local file system (simultaneously displaying and storing locally to allow pause and rewind; see Payton at column 8, lines 11-25).

As to claim 18, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the processor is further configured with the logic to perform multiple read operations and multiple write operations in parallel to access a plurality of data in the local file system (see Payton at column 7, lines 13-56 and column 8, lines 11-25).

As to claim 19, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the multiple read operations and multiple write operations occur substantially concurrently within substantially the same window of time (see Payton at column 7, lines 13-56 and column 8, lines 11-25).

As to claim 20, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the multiple read operations and multiple write operations share slices of a window of time as if occurring substantially in parallel (see Payton at column 7, lines 13-56 and column 8, lines 11-25).

As to claims 5-8, Payton, Norwood, Tsukidate, Schein and Ellis disclose detecting when the system is connected, disconnected, operable or inoperable (see Norwood at column 5, lines 23-42).

As to claims 40 and 96, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the processor is further configured to receive the retrieved electronic programming guide information entirely into the memory (see Schein at column 9, lines 22-62 and Tsukidate at column 13, lines 10-13, lines 48-56 and column 14, lines 25-30) rather than the local storage device (when the device is determined to be offline; see Norwood at column 5, lines 23-42), wherein the processor is further configured with the logic to access the electronic programming guide information for presentation in a display device (see Schein at column 14, lines 18-33).

As to claims 41 and 97, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the processor is further configured to receive the electronic programming guide information entirely into the local storage device (see Tsukidate at column 12, lines 60-65 and column 13, lines 40-44), wherein the processor is further configured with the logic to access the electronic programming guide information for presentation in a display device (see Tsukidate at column 12, lines 60-65 and column 13, lines 40-44).

As to claim 42, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the processor is further configured to receive the list of media content instances for an extended amount of days and the corresponding standard description information into the local storage device (see Tsukidate at column 12, lines 60-65 and column 13, lines 40-44).

As to claim 43, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the processor is further configured to receive the list of media content instances for an extended amount of days and the corresponding standard description information and long description information into the local storage device (see Tsukidate at column 12, lines 60-65 and column 13, lines 40-44).

As to claims 44 and 98, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the processor is further configured to receive the long description information into the local storage device for the list of media content instances for the standard amount of days stored in the memory (see Tsukidate at column 12, lines 60-65 and column 13, lines 40-44).

As to claims 45 and 99, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the processor is further configured to receive the media content instance previous audio and data clips associated with the media content instances for the standard amount of days and store said media content instance preview audio and data clips into the memory (see Tsukidate at column 12, lines 60-65 and column 13, lines 40-44 and see Schein at column 9, line 22-column 10, line 28 and column 22, lines 3-9).

As to claims 46 and 100, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the processor is further configured to transfer said media content instance previous audio and data clips from the memory to the local storage device (see

Tsukidate at column 12, lines 60-65 and column 13, lines 40-44), wherein the processor is further configured to access said media content instance preview audio and data clips from the local storage device to the memory (see Tsukidate at column 12, lines 60-65 and column 13, lines 40-63), wherein the processor is further configured to present said media content preview audio and data clips on a display device from the memory (see Schein at Fig. 3; column 8, line 35-column 9, line 22 and column 22, lines 3-9).

As to claims 47 and 101, Payton, Norwood, Tsukidate, Schein and Ellis disclose wherein the processor is further configured to transfer said media content instance previous audio and data clips from the memory to the local storage device (see Schein at Fig. 3; column 8, line 35-column 9, line 22 and column 22, lines 3-9 and see Tsukidate at column 12, lines 60-65 and column 13, lines 40-63), wherein the processor is further configured to access said media content instance preview audio and data clips from the local storage device (see Schein at Fig. 3; column 8, line 35-column 9, line 22 and column 22, lines 3-9 and see Tsukidate at column 12, lines 60-65 and column 13, lines 40-63), and present said media content preview audio and data clips on a display device from the local storage device (see Schein at Fig. 3; column 8, line 35-column 9, line 22 and column 22, lines 3-9 and see Tsukidate at column 12, lines 60-65 and column 13, lines 40-63).

7. Claims 49-51 and 53-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Payton, Norwood, Tsukidate, Schein and Ellis as applied above and further in view of Dougherty et al. (Dougherty) (7,028,327) (of record).

As to claim 49, Payton, Norwood, Tsukidate, Schein and Ellis disclose all of the claim limitations except wherein the processor is further configured to retrieve hyper linked data corresponding to a media content instance before the presentation of said media content instance.

In an analogous art, Dougherty discloses broadcast media receiver system (column 7, lines 4-19) wherein the processor is further configured with the logic to retrieve hyper linked data corresponding to a media content instance before the presentation of said media content instance (precache; column 19, lines 5-24) for the typical benefit of allowing the system to provide interactive content which is maintained in synchronous with the display regardless of signal path corruption and other technical barriers (column 3, lines 51-64 and column 1, lines 24-49).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Payton, Norwood, Tsukidate, Schein and Ellis' system to include wherein the processor is further configured to retrieve hyper linked data corresponding to a media content instance before the presentation of said media content instance, as taught in combination with Dougherty, for the typical benefit of allowing the system to provide interactive content which is maintained in synchronous with the display regardless of signal path corruption and other technical barriers.

As to claim 50, Payton, Norwood, Tsukidate, Schein, Ellis and Dougherty disclose wherein the processor is configured to maintain hyperlinked data in entries in a hyperlinked data structure indexed by time and date and service (see Dougherty at column 16, lines 13-60).

As to claim 51, Payton, Norwood, Tsukidate, Schein, Ellis and Dougherty disclose wherein the processor further configured to maintain the hyperlinked data in entries in a hyperlinked data structure indexed by time and date and channel (see Dougherty at column 16, lines 13-60).

As to claim 53, Payton, Norwood, Tsukidate, Schein, Ellis and Dougherty disclose wherein the hyper-linked data structure provides a channel directory (see Dougherty at column 16, lines 23-44) and subdirectories segregated into time blocks corresponding to the media content instance time period of presentation (see Tables 1 and 2; column 16, line 45-column 17, line 4), wherein the time blocks include a current time block and an upcoming time block (see Tables 1 and 2; column 16, line 45-column 17, line 21).

As to claim 54, Payton, Norwood, Tsukidate, Schein, Ellis and Dougherty disclose wherein the current time block and upcoming time block are further segregated into time slots of increased granularity corresponding to the time presentation of the

hyper-linked data with a corresponding instance in a media content instance within said time blocks (see Tables 1 and 2; column 16, line 45-column 17, line 21).

As to claim 55, Payton, Norwood, Tsukidate, Schein, Ellis and Dougherty disclose wherein the hyperlinked data structure is updated continuously by the application client to maintain the hyperlinked data for current upcoming media content instances (column 16, line 13-60).

As to claim 56, Payton, Norwood, Tsukidate, Schein, Ellis and Dougherty disclose wherein the processor is further configured to update the hyperlinked data when the time and date has substantially elapsed (storing new time dependent; column 18, line 30-column 19, line 24).

As to claim 57, Payton, Norwood, Tsukidate, Schein, Ellis and Dougherty disclose wherein the processor is further configured to use a local file system for caching the hyperlinked data into the local file system from a virtual file system (Fig. 2; column 14, lines 30-58 and column 19, lines 5-22), wherein the hyperlinked data corresponds to data located in a designated time slot of a presentation of a media content instance (column 19, lines 5-22), wherein the application is further configured to retrieve the hyper linked data from the local file system and present it during its designated time slot during the presentation of the media content instance (column 19, lines 5-22).

8. Claims 15, 23-30, 32-38 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Payton, Norwood, Tsukidate, Schein and Ellis as applied above and further in view of Daniels (6,973,669) (of record).

As to claim 23, Payton, Norwood, Tsukidate, Schein and Ellis disclose all of the claim limitations except wherein the media is partitioned into a third media content portion for streaming media content for presentation to a user.

In an analogous art, Daniels discloses broadcast media receiver system (Fig. 1; column 4, lines 23-38 and column 24, lines 13-34) wherein the local storage device located within the receiver is partitioned into multiple portions including a third media content portion for streaming media content for presentation to a user (third portion to properly store and playback after later breaks; see Daniels at column 14, line 37-column 15, line 11) for the typical benefit of allowing the viewer to pause and resume playing a live video program and additional content as desired (column 9, lines 31-45).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Payton, Norwood, Tsukidate, Schein and Ellis' system to include wherein the media is partitioned into a third media content portion for streaming media content for presentation to a user, as taught in combination with Daniels, for the typical benefit of allowing the viewer to pause and resume playing a live video program and additional content as desired.

As to claim 24, Payton, Norwood, Tsukidate, Schein, Ellis and Daniels disclose wherein the media partitions are user configurable (see Daniels at column 13, lines 4-24).

As to claims 15 and 25, Payton, Norwood, Tsukidate, Schein and Ellis disclose all of the claim limitations except two tuners for receiving among a plurality of transmission channels, further comprising an out of band channel for receiving and sending data further comprising a communication port.

In an analogous art, Daniels discloses broadcast media receiver system (Fig. 1; column 4, lines 23-38 and column 24, lines 13-34) wherein the local storage device located within the receiver is partitioned into multiple portions including a third media content portion for streaming media content for presentation to a user (third portion to properly store and playback after later breaks; see Daniels at column 14, line 37-column 15, line 11), the receiver including two tuners for receiving among a plurality of transmission channels (see Daniels at column 25, lines 3-13), an out of band channel for receiving and sending data (data tuner; see Daniels at Figs. 20-21 and column 26, lines 38-43) and a communication port (see Daniels at column 23, lines 29-35) for the typical benefit of allowing multiple programs to easily be received and accessed (see Daniels at column 25, lines 3-13, column 26, lines 38-43 and column 23, lines 29-35),

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Payton, Norwood, Tsukidate, Schein and Ellis' system to include two tuners for receiving among a plurality of transmission channels, further

comprising an out of band channel for receiving and sending data further comprising a communication port, as taught in combination with Daniels, for the typical benefit of allowing multiple programs to easily be received and accessed.

As to claim 27, Payton, Norwood, Tsukidate, Schein, Ellis and Daniels disclose wherein the processor is further configured with the logic to request a plurality of data simultaneously from the plurality of the transmission channels (see Daniels at column 25, lines 3-13).

As to claims 28, Payton, Norwood, Tsukidate, Schein, Ellis and Daniels disclose wherein the memory and the local file system store application data (see Daniels at column 24, lines 11-24, column 26, lines 14-27 and column 27, lines 35-56), application executable programs (see Daniels at column 24, lines 11-24, column 26, lines 14-27 and column 27, lines 35-56), and data associated with applications (see Daniels at column 24, lines 11-24, column 26, lines 14-27 and column 27, lines 35-56), and data associated with media services (see Daniels at column 24, lines 11-24, column 26, lines 14-27 and column 27, lines 35-56).

As to claim 29, Payton, Norwood, Tsukidate, Schein, Ellis and Daniels disclose wherein the processor is further configured with the logic to perform a multiplicity of write operations to the local file system substantially in parallel to store data and application clients from a subscriber television network (see Daniels at column 7, line

48-column 8, line 8), from the processor, and from a local device connected to the communication port (see Daniels at column 23, lines 29-35).

As to claim 30, Payton, Norwood, Tsukidate, Schein, Ellis and Daniels disclose wherein the processor is further configured with the logic to perform a multiplicity of read operations from the local file system in parallel to retrieve data and application clients previously stored in the local file system (see Daniels at Fig. 14; column 25, lines 3-13) to transmit the respective data to a local device connected to the communication port (see Daniels at column 23, lines 29-35), to the memory for use by an application client or operating system executing in the processor (see Daniels at column 26, lines 14-27) and to be transmitted to a destination in the subscriber network (viewer preferences being sent to the television signal provider; see Daniels at column 26, lines 14-27).

As to claim 32, Payton, Norwood, Tsukidate, Schein, Ellis and Daniels disclose wherein the processor is further configured with the logic to substantially simultaneously permanently record a media content instance received from one transmission channel and temporarily store a media content instance received from another transmission channel (see Daniels at column 2, lines 48-60, column 7, line 48-column 8, line 8 and column 6, lines 48-59).

As to claim 33, Payton, Norwood, Tsukidate, Schein, Ellis and Daniels disclose wherein the processor is further configured with the logic to substantially simultaneously

permanently record a media content instance received from one transmission channel and temporarily store a media content instance received from another transmission channel (see Daniels at column 2, lines 48-60, column 7, line 48-column 8, line 8 and column 6, lines 48-59).

As to claim 34, Payton, Norwood, Tsukidate, Schein, Ellis and Daniels disclose wherein the processor is further configured with the logic to substantially simultaneously display three media content instances (see Daniels at Fig. 14; column 24, line 63-column 25, line 13 and column 22, line 48-column 23, line 15), wherein two media content instances are received from the transmission channels (see Daniels at Fig. 14; column 24, line 63-column 25, line 13) and the third media content instance is received from the local file system (see Daniels at Fig. 14; column 24, line 63-column 25, line 13 and column 22, line 48-column 23, line 15).

As to claim 35, Payton, Norwood, Tsukidate, Schein, Ellis and Daniels disclose wherein the media content instances from the transmission channels are received in real-time (see Daniels at Fig. 14; column 24, line 63-column 25, line 13).

As to claim 36, Payton, Norwood, Tsukidate, Schein and Ellis disclose all of the claim limitations except an application client, wherein the processor is further configured to use the memory and the local storage device for storing application client data in data structures with time sensitive data entries maintained by client daemon task.

In an analogous art, Daniels discloses broadcast media receiver system (Fig. 1; column 4, lines 23-38 and column 24, lines 13-34) wherein the local storage device located within the receiver is partitioned into multiple portions including a third media content portion for streaming media content for presentation to a user (third portion to properly store and playback after later breaks; see Daniels at column 14, line 37-column 15, line 11), the receiver including an application client and a processor configured to use the memory and the local storage for storing application client data in data structures with time sensitive data entries maintained by client daemon task (receiving and storing program scheduling information; see Daniels at Fig. 22; column 27, lines 35-47) for the typical benefit of providing access to received data (see Daniels at column 25, lines 3-13, column 26, lines 38-43 and column 23, lines 29-35),

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Payton, Norwood, Tsukidate, Schein and Ellis' system to include an application client, wherein the processor is further configured to use the memory and the local storage device for storing application client data in data structures with time sensitive data entries maintained by client daemon task, as taught in combination with Daniels, for the typical benefit of providing access to received data.

As to claim 37, Payton, Norwood, Tsukidate, Schein, Ellis and Daniels disclose wherein the processor is further configured to receive the application client data from an in band tuner (tuners to receive preview video for the guide; see Daniels at column 24, line 63-column 25, line 13).

As to claim 38, Payton, Norwood, Tsukidate, Schein, Ellis and Daniels disclose wherein the processor is further configured to receive the application client data from a plurality of in band tuners (plurality of tuners to receive preview video for the guide; see Daniels at column 24, line 63-column 25, line 13).

As to claim 48, Payton, Norwood, Tsukidate, Schein and Ellis disclose all of the claim limitations except the step of receiving sprites from the remote storage device and storing the sprites in the storage device, further comprising the step of retrieving the sprites from the local storage device and causing the presentation of the sprites in coordination with the presentation of a media content instance.

In an analogous art, Daniels discloses broadcast media receiver system (Fig. 1; column 4, lines 23-38 and column 24, lines 13-34) wherein the local storage device located within the receiver is partitioned into multiple portions including a third media content portion for streaming media content for presentation to a user (third portion to properly store and playback after later breaks; see Daniels at column 14, line 37-column 15, line 11), the receiver receiving sprites from the remote storage device and storing the sprites in the storage device (web graphics; see Daniels at column 4, lines 23-38 and column 24, lines 1-34), further comprising the step of retrieving the sprites from the local storage device and causing the presentation of the sprites in coordination with the presentation of a media content instance (see Daniels at column 4, lines 23-38 and

column 24, lines 13-34) for the typical benefit of allowing the user to receive and view additional content (see Daniels at column 4, lines 23-38 and column 24, lines 13-34).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Payton, Norwood, Tsukidate, Schein and Ellis' system to the step of receiving sprites from the remote storage device and storing the sprites in the storage device, further comprising the step of retrieving the sprites from the local storage device and causing the presentation of the sprites in coordination with the presentation of a media content instance, as taught in combination with Daniels, for the typical benefit of allowing the user to receive and view additional content.

As to claim 26, while Payton, Norwood, Tsukidate, Schein, Ellis and Daniels disclose a plurality of transmission channels, they fail to specifically disclose at least one digital transmission channel and at least one analog transmission channel.

The examiner takes Official Notice that it was notoriously well known in the art at the time of invention by applicant for a television receiver to utilize both an analog and digital transmission channel, such as when receiving both off-air television and digital satellite, for the typical benefit of providing a viewer with an increased amount of information and content by allowing access to both digital and analog content providers and connections.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Payton, Norwood, Tsukidate, Schein, Ellis and Daniels' system to include at least one digital transmission channel and at least one analog

transmission channel for the typical benefit of providing a viewer with an increased amount of information and content by allowing access to both digital and analog content providers and connections.

9. Claim 130 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukidate in view of Norwood and Ellis.

As to claim 130, while Tsukidate discloses a dual mode file system in a digital home communication terminal (Fig. 10), comprising:

retrieving from a remotely located virtual file system, first EPG information, and storing the first EPG information in a memory residing in the DHCT (column 13, lines 10-13, lines 48-56 and column 14, lines 25-30), the first EPG information including a list of media content instances (column 8, lines 20-56);

retrieving from the remotely located virtual file system, first and second EPG information and storing the first EPG information in a memory residing in the DHCT (column 13, lines 10-13, lines 48-56 and column 14, lines 25-30) and the second EPG information in the local storage device (column 12, lines 60-65 and column 13, lines 40-44), the second EPG information including an extended list of media content instances (column 8, lines 1-56); and

presenting the EPG information responsive to a user request (column 13, lines 40-62), he fails to specifically disclose determining whether a local storage device is coupled to the DHCT;

responsive to determining that the local storage device is not coupled to the DHCT, storing the EPG information in the memory,

responsive to determining that the local storage device is coupled to the DHCT, storing EPG information in the memory and local storage device and

wherein the first EPG information includes a list of media content instances for a standard amount of days and second EPG information includes a list of media content instances for an extended amount of days.

In an analogous art, Norwood discloses a computer storage system (Fig. 1) wherein a disk monitor will determine whether local file systems (disk drives; column 2, lines 38-48) are currently coupled and available for use by the system (column 2, lines 28-38 and column 5, lines 22-42) to allow the system to dynamically determine which resources are currently available (column 2, line 28-column 3, line 14) for the typical benefit of allowing the computer system to dynamically determine status changes in available storage resources and operate accordingly (see Abstract and column 2, line 28-column 3, line 14 and column 1, lines 8-31).

Finally, in an analogous art, Ellis discloses an interactive electronic program guide system (Fig. 3 and 8) wherein the EPG is customized to include media listings for a standard amount of days and extended amount of days (Fig. 8-10; column 6, line 30-column 7, line 20) for the typical benefit of maximizing memory usage while allowing additional applications to be stored in memory (column 3, lines 4-34).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Tsukidate's system to include determining whether the

local storage device is coupled, and responsive to determining whether the storage device is coupled, utilizing just the virtual file system or both the virtual file system and the local storage device, as taught in combination with Norwood, for the typical benefit of allowing the computer system to dynamically determine status changes in available storage resources and operate accordingly.

Finally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Tsukidate and Norwood's system to include storing a list of media content instances for a standard amount of days and a list of media content instances for an extended amount of days, as taught in combination with Ellis, for the typical benefit of maximizing memory usage while allowing additional applications to be stored in memory.

Conclusion

10. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on _____.
(Date)

Typed or printed name of person signing this certificate:

Signature: _____

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Certificate of Transmission

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. () _____ - _____ on _____.
(Date)

Typed or printed name of person signing this certificate:

Signature: _____

Registration Number: _____

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER KELLEY whose telephone number is (571)272-7331. The examiner can normally be reached on Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James Sheleheda/
Examiner, Art Unit 2424

JS